

India has 46th in the Global Innovation Index (GII)

*GS Paper - 2 -Government Policies & Interventions ,
Issues Relating to Development GS Paper - 3 -Growth &
Development*

The seven GII pillar scores for India



context

India has climbed two spots and has been **ranked 46th in the Global Innovation Index (GII) 2021 rankings.**

What is Global Innovation Index (GII) 2021:

- **Launch:** The GII is launched by the **World Intellectual Property Organization (WIPO)**, a specialized agency of the **United Nations**.
- The GII aims to capture the multi-dimensional facets of innovation ranking and rich analysis referencing around **132 economies**.
- **Partnership:** It is published in **partnership with the Portulans Institute and other corporate partners:**
 - The Brazilian National Confederation of Industry (CNI), **Confederation of Indian Industry (CII)**, Ecopetrol (Colombia) and the Turkish Exporters Assembly (TIM).
- **Indicators:** The index ranks world economies according to their innovation capabilities and consists of roughly 80 indicators grouped into **innovation inputs** and **outputs**.
- **Innovation inputs:** Institutions; Human capital and research; Infrastructure; Market sophistication; Business sophistication.

- **Innovation outputs:** Knowledge and technology outputs; Creative outputs

Global Performance:

- **Top Five: Switzerland, Sweden, U.S., and U.K.** continue to lead the innovation ranking, and have all ranked in the top 5 in the past three years.
- The **Republic of Korea** joins the top 5 of the GII for the first time in 2021.
- **Asian Countries:** Four Asian economies feature in the top 15: **Singapore (8), China (12), Japan (13) and Hong Kong, China (14).**

India's Performance:

- India has been on an upward trajectory over the past few years in the **GI**.
- India has shot up from a rank of 81 in 2015 to 46 in 2021.
- India performs better in **innovation outputs** than **innovation inputs** in 2021.

- This year India ranks **57th in innovation inputs**, the same as last year but higher than 2019.
- As for innovation outputs, **India ranks 45th**. This position is the same as last year but higher than 2019.
- India **ranks 2nd among the 34 lower middle-income group economies**.
- India **ranks 1st among the 10 economies in Central and Southern Asia**.
- The government attributed the country's improved performance to the departments of atomic energy, science and technology, biotechnology and space.

Major Findings in GII 2021:

- **Investments in innovation** reached an **all-time high** before the pandemic with R&D growing at an exceptional rate of 8.5% in 2019.
- **Government budget allocations** for the top R&D spending economies showed continued growth in 2020.
- The **publication of scientific articles worldwide grew by 7.6%** in 2020.
- **India, Kenya, the Republic of Moldova, and VietNam** hold the record for **overperforming on innovation** relative to their level of development for the 11th year in a row.

Basic understanding

- The **India Innovation Index** has been developed by **NITI (National Institution for Transforming India) Aayog** on the lines of the GII.
 - The index goes beyond traditional approaches by considering the best parameters in measuring innovation such as **patents per million of population, publication in scientific journals, percentage of GDP spending on research.**
 - It also adds parameters that are specific to the Indian economy (eg. **Demographic dividend**), to give it a more holistic coverage.

Source:PIB

3rd State Food Safety Index (SFSI) developed by FSSAI

*GS Paper - 2 -- Government Policies & Interventions ,
Health*



Context

The **Union Minister for Health and Family Welfare** has released the **3rd State Food Safety Index (SFSI)**. Also, **19 Mobile Food Testing Vans (Food Safety on Wheels)** have been flagged off to supplement the food safety ecosystem across the country.

What is this Index

- The index is **developed by FSSAI (Food Safety and Standards Authority of India)** to measure the performance of states on **five significant parameters of Food Safety**.
- The **parameters include** Human Resources and Institutional Data, Compliance, Food Testing – Infrastructure and Surveillance, Training & Capacity Building and Consumer Empowerment.
- The Index is a **dynamic quantitative and qualitative benchmarking model** that provides an **objective framework** for evaluating food safety **across all States/UTs**.
- The first State Food Safety Index for the year 2018-19 was announced on the first-ever **World Food Safety Day** on 7th June 2019.

Most performing States:

- Among the **larger states, Gujarat was the top ranking state**, followed by Kerala and Tamil Nadu.
- Among the **smaller states, Goa stood first** followed by Meghalaya and Manipur.
- Among **UTs, Jammu & Kashmir, Andaman & Nicobar Islands and New Delhi** secured top ranks.

Significance of Food Safety:

- Access to sufficient amounts of safe food is **key to sustaining life and promoting good health.**
 - Foodborne illnesses are usually infectious or toxic in nature and often invisible to the plain eye, caused by bacteria, viruses, parasites or chemical substances entering the body through contaminated food or water.
 - An estimated 4,20,000 people around the world die every year after eating contaminated food and children under 5 years of age carry 40% of the foodborne disease burden, with 1,25, 000 deaths every year.
- Food safety has a critical role in assuring that **food stays safe at every stage of the food chain** - from production to harvest, processing, storage, distribution, all the way to preparation and consumption.
 - Food production is responsible for up to **30% of global greenhouse-gas** emissions contributing to **global warming.**

What are the Indian initiatives

1) Eat Right India Movement:

- It is **an initiative of the Government of India and FSSAI** to transform the country's food system in order to ensure safe, healthy and sustainable food for all Indians.
- It is aligned to the **National Health Policy 2017** with its focus on preventive and promotive healthcare and flagship programmes like **Ayushman Bharat, POSHAN Abhiyaan, Anemia Mukta Bharat** and **Swachh Bharat Mission**.

2) Eat Right Station Certification:

- The certification is awarded by FSSAI to railway stations that set benchmarks **(as per the Food Safety and Standards Act, 2006)** in providing safe and wholesome food to passengers.
- The **Eat Right Research Awards and Grants** to encourage and recognize high-quality research in the area of food safety and nutrition in India has also been launched.
- The **results of PAN-India survey** for identifying the presence of industrially produced **trans fatty acid content** in the selected foods has been released. Overall, only 84

samples, i.e. 1.34%, have more than 3% industrially produced trans fats from the total of 6245 samples.

- In an effort to engage industry on the **issue of plastic in food packaging**, 24 food businesses signed a pledge on becoming “**Plastic Waste Neutral**” by collecting, processing and recycling of 100% post-consumer plastic waste from across the sources.

What are the Global initiatives

- The **Codex Alimentarius**, or “**Food Code**” is a collection of standards, guidelines and codes of practice adopted by the Codex Alimentarius Commission.
- The **Codex Alimentarius Commission** is a joint intergovernmental body of the **Food and Agriculture Organization (FAO)** and **World Health Organization (WHO)**.
- Currently, it has **189 members and India is a member.**

Source: PIB

Jammu and Kashmir government implement the Forest Rights Act (FRA), 2006

*GS Paper - 2 Issues Relating to Development , Issues
Related to SCs & STs ,Management of Social
Sector/Services ,Judgements & Cases*



Forest Rights Act

Enacted in 2006, the Forest Rights Act came into effect in 2008. Considered a landmark piece of legislation as it attempts to correct historical injustices against forest dwellers in the colonial era and in independent India, it recognises forest dwellers' individual rights over their land and a village's rights to manage and conserve the forest:

Individual Forest Rights: Any person belonging to a scheduled tribe can claim rights to live in and cultivate up to 4 ha if he occupied it and depended on it as of December 13, 2005. A non-tribal, in addition, will have to prove his family's residence in the vicinity of the forest for 75 years prior to December 2005

Community Forest Rights: The Act recognises the rights of a gram sabha over forest land within the village boundaries or seasonal use of landscape for pastoral communities. This allows the villagers to own and collect, use and dispose of minor forest produce besides timber, including the right to use grazing land and water bodies and the right to protect and regenerate any community resource, among others

Context

Recently, the **Jammu and Kashmir government** has decided to **implement the Forest Rights Act (FRA), 2006**, which will **elevate the socio-economic status** of a sizable section of the 14-lakh-strong population **of tribals and nomadic communities**.

What is this act

- FRA enacted in 2006 **recognises the rights of forest-dwelling tribal communities** and other traditional forest dwellers to forest resources on which these communities **were dependent for a variety of needs, including livelihood, habitation** and other sociocultural needs.
- It recognizes and vest the forest rights and occupation in Forest land in **Forest Dwelling Scheduled Tribes (FDST)** and **Other Traditional Forest Dwellers (OTFD)** who have been residing in such forests for generations.
- It strengthens the **conservation regime of the forests** while ensuring livelihood and food security of the FDST and OTFD.
- The **Gram Sabha** is the authority to initiate the process for **determining the nature and extent of Individual Forest Rights (IFR)** or **Community Forest Rights (CFR)** or both that may be given to **FDST and OTFD**.

What are the Rights Under the Forest Rights Act:

1) Title rights:

- It gives FDST and OTFD the right to ownership to land farmed by tribals or forest dwellers subject to a maximum of 4 hectares.
- **Ownership is only for land** that is actually being cultivated by the concerned family and no new lands will be granted.

2)Use rights:

- The rights of the dwellers extend to extracting **Minor Forest Produce**, grazing areas etc.

3)Relief and development rights:

- To rehabilitate **in case of illegal eviction or forced displacement** and to basic amenities, subject to restrictions for forest protection.

4)Forest management rights:

- It includes the right **to protect, regenerate or conserve or manage any community forest resource** which they have been traditionally protecting and conserving for sustainable use.

What are the Significance of this act

1)Constitutional Provision Expansion:

- It **expands the mandate of the Fifth and the Sixth Schedules** of the Constitution that protect the claims of indigenous communities over tracts of land or forests they inhabit.

2)Security Concerns:

- The alienation of tribes was one of the factors behind the **Naxal Movement**, which affected states like Chhattisgarh, Odisha and Jharkhand.

3)Forest Governance:

- It has the **potential to democratise forest governance** by recognising community forest resource rights.
- It will ensure that **people get to manage their forest on their own**, which will regulate exploitation of forest resources by officials, improve forest governance and better management of tribal rights.

What are the major Challenges:

1)Administrative Apathy:

- As tribals are not a big vote bank in most states, **governments find it convenient to subvert FRA** or not bother about it at all in favour of monetary gains.

- The forest **bureaucracy has misinterpreted the FRA as an instrument to regularise encroachment** instead of a welfare measure for tribals.
- Corporates fear they may lose the cheap access to valuable natural resources.

2) Dilution of Act:

- Certain sections of environmentalists raise the concern that **FRA bends more in the favour of individual rights**, giving lesser scope for community rights.

3) Institutional Roadblock:

- Rough maps of community and individual claims are prepared by Gram Sabha which at times often lack technical knowhow and suffers from educational incapacity.

4) Misuse of FRA:

- The FRA has been misused and communities have rushed to file claims. Politicians across party lines have **interpreted FRA as a land distribution exercise** and have fixed targets for districts.

What can be done more

- It is important that the **governments at Central and State levels are strengthened** with human and

financial resources to help implement FRA on a mission mode.

- Besides leveraging modern technology to map and monitor the implementation of FRA, the **forest bureaucracy must also be reformed to serve as service providers** to gram sabhas.

Source: TH

Restrictions on funding for 10 international NGOs

GS Paper - 2 --Government Policies & Interventions , Non-Governmental Organisations (NGOs)



Context

Recently, the Union Government has put restrictions on funding for 10 international **Non-Governmental Organisations** (NGO's) working on **Child Rights, Climate Change and environmental projects.**

Related information

In February 2021, the Ministry of Home Affairs (MHA) issued **new regulating guidelines to banks under Foreign Contribution (Regulation) Act, 2010.**

Background

- The **Reserve Bank of India** had previously asked for several foreign organisations to be put on the **Prior Reference Category (PRC) list.**
- It implies that as and when the foreign donor wants to transfer the money to some recipient association in India, the same needs **prior clearance from the Ministry of Home Affairs.**
- Over 80 international agencies are on the list.

Major Provisions Under FCRA Amendment, 2020:

- It requires any organisation that wants to register itself under the FCRA to **have existed for at least three years** and to have spent a minimum of **Rs 15 lakh on its core activities during the last three financial years** for the benefit of the society.
- The NGOs are also required to **submit commitment letters from their donors**, specifying the amount of foreign contributions and the purpose for which they are proposed to be given.

What are reasons for restriction

1)It was stated that dozens of NGOs were **indulged in outright misappropriation or misutilisation of foreign contributions.**

2)Even doubling the inflow of foreign contribution between the years **2010 and 2019, many recipients have not utilised the fund** for the purpose for which they were registered or granted under FCRA Act.

- It has also led the central government to cancel certificates of registration of more than 19,000 recipient organisations during the period between 2011 and 2019.

Major Implications:

1) Discouraging Constitutional Rights:

- These moves will have **a discouraging effect on the constitutionally guaranteed rights** to freedom of association, expression and assembly (Article 19).
- The government has expanded governmental discretion, bureaucratic control and oversight with respect to the day-to-day functioning of NGOs in India.

2) Can Curb NGOs' Humanitarian Work:

- It can choke NGOs with red tape so that **they are unable to do their humanitarian work.**
- It can make it more difficult for grassroots NGOs that are independent of government, business, religion and political groups to operate in India.

3) Repressing Freedom:

- The passage of the **FCRA Amendment, 2020** and the actions against **Amnesty** place India next to only Russia, where the government has used the Foreign Agents Law, 2012 and Undesirable Organisations Law, 2015 as **a weapon to repress freedom of association and expression.**

- International organisations had expressed concern over the use of the **Foreign Contribution Regulation Act to “stifle the voices” of activists** and non-governmental organisations in India.

What can be done more

- **Excessive regulation** on foreign contribution **may affect working of the NGOs** which are helpful in implementing government schemes at the grassroots. They fill the gaps, where the government fails to do their jobs.
- The regulation should **not hamper sharing of resources across national boundaries** essential to the functioning of a global community, and **should not be discouraged unless there is reason** to believe the funds are being used to aid illegal activities.

Source: TH

Tribal Cooperative Marketing Development Federation of India Promote pearl farming in tribal areas.

*GS Paper - 3 -Growth & Development , Economics of
Animal-Rearing*



Tribal Co-Operative Marketing Development Federation of India Limited
Ministry of Tribal Affairs, Govt. of India

Context

Recently, the **Trifed (Tribal Cooperative Marketing Development Federation of India)** inked an agreement with the **Jharkhand-based Purty Agrotech** for the promotion of pearl farming in tribal areas.

Define Tribal Cooperative Marketing Development Federation of India

- It is a **national-level apex organization** functioning under the

administrative control of the Ministry of Tribal Affairs. It came into existence in 1987.

- It has its **Head Office located in New Delhi** and has a network of **13 Regional Offices** located at various places in the country.
- Its main objective is **socio-economic development of tribal people in the country** by way of marketing development of the tribal products such as metal craft, tribal textiles, etc.
- It mainly undertakes two functions viz. **Minor Forest Produce (MFP) development and Retail Marketing and Development.**

Important factors

- As part of the agreement, Purty Agrotech pearls will be sold through **141 Tribes India outlets, apart from various e-commerce platforms.**
- Purty Agrotech's centre will be developed into a **Van Dhan Vikas Kendra Cluster (VDVKC)**. Besides, there is a plan to develop 25 such VDVKCs for pearl farming in Jharkhand.
- **VDVKs** provide skill upgradation and capacity building training to tribals and setting up of primary processing and value addition facilities.

- The TRIFED has also signed **an MoU with e-grocery platform Big Basket** to promote and sell natural ‘Van Dhan’ products.
- The breeding of oysters and development of pearls is a sustainable mode of business and can be **easily practised by tribals who have access to nearby water bodies.**
- It will prove to be **game-changers for tribal livelihoods in the times to come.**

What is Pearl Farming:

- Pearls are the **only gemstones in the world that come from a living creature. Mollusks** such as oysters and mussels produce these precious jewels that people have adored since ancient times.
- Pearl oysters are farmed in a number of countries in the world in the production of cultured pearls.
- Freshwater pearls are pearls that are grown on pearl farms using **freshwater mussels.** Since mussels are the organic hosts, the **pearls can grow up to 10 times bigger than those made by saltwater oysters,** naturally. And, the **luster freshwater pearls produce is astounding.**

Major Benefits:

1) Increased Farmers Income: The income of farmers in India is usually dependent on external factors like climate and this dependence often leads to their losses but on the other hand, Pearl farming is totally independent of these factors and gives one a high amount of profit.

2) Eco-Friendly: Pearl farming is eco-friendly. It provides habitat for fish and improves species diversity.

3) Water Purification: Filter feeder oysters also purify the water. A single oyster clears over 15 gallons of water a day.

- It accumulates heavy metals from the water, and removes harmful pollutants as well.

Major Initiatives Taken by Government

1) Pearl farmers can get benefits under **PMMSY (Pradhan Mantri Matsya Sampada Yojana)**.

2) Considering the scope of pearl farming, the Department of Fisheries has included a **sub-component for pearl culture in the Blue Revolution scheme** for encouraging the sector.

Source: IE